



Survey of the Nation's Lakes: A Fact Sheet for Communities



The U.S. Environmental Protection Agency (EPA), states, and tribes are conducting a nationwide survey this summer of the condition of the nation's lakes. The survey will help citizens and governments measure the health of our waters, take actions to prevent pollution, and evaluate the effectiveness of protection and restoration efforts.

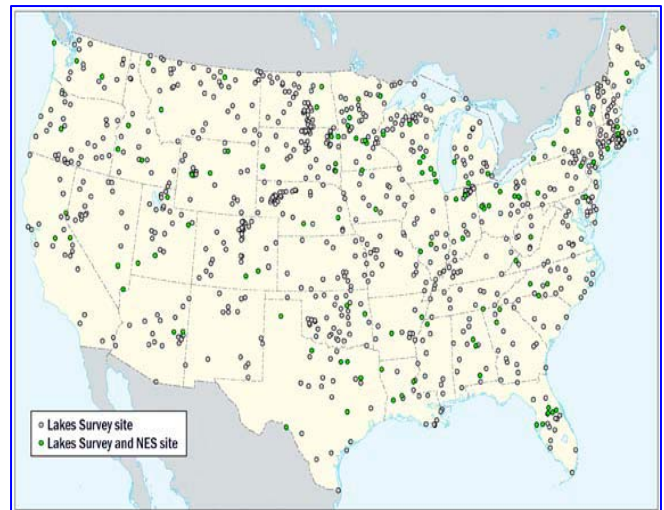
Designed to estimate the percentage of lakes that are in good, fair, or poor condition, the survey will serve as a scientific report card on America's lakes. It will examine ecological, water quality, and recreational indicators, and assess how widespread key stressors (such as nitrogen, phosphorus, and acidification) are across the country.

The survey is a collaborative effort that involves dozens of state environmental and natural resource agencies, federal agencies, universities and other organizations. In most states, state water quality staff will conduct the water quality sampling and habitat assessments.

How were the lakes selected?

A total of 909 lakes - representing five size classes and distributed relatively evenly across the lower 48 states - are included in the survey. A pilot project is also underway in Alaska. EPA selected the lakes from the nation's

natural and man-made freshwater lakes, ponds and reservoirs. Lakes must be at least one meter deep and over ten acres in size. The survey does not include the Great Lakes or the Great Salt Lake. Lakes were selected randomly using a statistical survey design to represent the population of lakes in their ecological region - the geographic area in which climate, ecological features, and plant and animal communities are similar.



Distribution of lakes in the survey

What about my lake?

If your lake is being sampled for this survey, it was selected randomly from the population of lakes in your part of the country. Your lake was not selected because it exhibits any particular problem or water quality condition, or because it was recommended for sampling by an agency or organization.

When the final report on the Survey of the Nation's Lakes is written, data from your lake will contribute to the regional and national picture of lake condition.

If your lake is not being sampled for this survey, it was not omitted for any particular reason, but rather because it was not randomly selected or did not fit into the target population of lakes (e.g., those greater than ten acres in area and at least one meter deep).

Many volunteer monitoring groups and lake associations have years of sampling data for their lakes, data vital to local lake management activities. This survey will provide a regional and national - and in some cases, statewide - assessment of lake condition. It will also allow those with sampling data on their lake to compare the condition of their lake to the range of lakes in their region or state.

What will researchers measure?

Field crews will be taking many measurements at each selected lake. They will be using consistent procedures at all sites so that results can be compared across the country. They will be measuring such things as:

- Temperature, dissolved oxygen, nutrients, chlorophyll a, water clarity, turbidity, and color
- Condition of the habitat along the shoreline
- Zooplankton and phytoplankton -- microscopic animals and plants in

the water that are an important part of the food chain

- Aquatic macroinvertebrates -- small animals such as insects and snails that are a source of food for fish and birds
- Bacteria -- indicators of fecal contamination from animals or humans.

They will also be taking sediment cores from the bottom of the lake.

What happens next?

Sampling will be conducted during the summer of 2007. EPA intends to issue a report on the findings in 2009.

Between the time lakes are sampled and the national report is published, samples will be analyzed in the lab, the data will be entered into a database and analyzed, and a draft report will be written and reviewed. The public will have the opportunity to review and comment on the draft report.

Where can I find out more?

For more information visit:

www.epa.gov/owow/lakes/lakessurvey,
or email us with questions at
lakessurvey@epa.gov

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